



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,287	09/22/2005	Hideaki Yamaoka	068022-5040	9535
9629 7590 03/03/2011 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004				
EXAMINER				
GEHMAN, BRYON P				
ART UNIT		PAPER NUMBER		
3728				
MAIL DATE		DELIVERY MODE		
03/03/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,287

Applicant(s)

YAMAOKA, HIDEAKI

Examiner

Bryon P. Gehman

Art Unit

3728

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10, 11, 13, 16, 17, 19-22 and 29-37 is/are pending in the application.
- 4a) Of the above claim(s) 36 and 37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 11, 13, 16, 17, 19-22 and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of Prior Art References Cited (PTO-502)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/10/11
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 10-11, 13, 16-17, 19-22 and 29-35 are finally rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention in the manner now identified. As originally claimed and disclosed, the particular composition of the biosensor makes no difference, as disclosed, for the purpose of inspection of the biosensor in the claimed biosensor-container combination. At page 3, lines 5-9, applicant states on the record that "the type of sensor to be contained in the container of the present invention is not particularly limited and the sensors may have or may not have lightfastness". At page 7, lines 3-4 of the original specification, the particular biosensors subsequently disclosed are indicated as an example only, and there is no disclosed criticality disclosed as to the particular biosensor structure being claimed as critical to the claimed combination of a container with biosensors contained therein. Accordingly, there is no original disclosure to support any relationship of criticality of a particular biosensor contained within the container to the combination as claimed. Applicant's reliance of the biosensor structure to provide some nexus of an inventive nature is lacking from the original disclosure. The biosensor per se was disclosed as an example of a conventional particular biosensor, and was indicated to be of unpatentable

significance by itself (never claimed individually as an inventive biosensor per se), nor was there any disclosure of a particular relationship with the claimed container to the particular structure of the biosensor so as to render their combination of patentable significance. The particularity of the biosensor as now claimed is not seen as to be pertinent to the combination of a much more generic biosensor and container as originally claimed

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10, 13, 16-17, 19-22 and 30-35 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001141686 in view of Beaman et al. (3,244,272). JP 2001141686 discloses a sensor-container combination comprising a container including a container body (3), and a plurality of sensors stacked and stored in the container. Beaman et al. disclose providing a container (10) with an entirely transparent container body to allow viewing of the stacked content of the container, including a transparent lid (14). To modify the container of JP 2001141686 employing the transparent container body and transparent lid teaching of Beaman et al. would have been obvious in order to allow complete visual ascertaining of the content of the sensor container, as suggested by Beaman et al.. "A combination of familiar elements

according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int 'l v. Teleflex Inc.*, 127 S. Ct. 1731, 82 USPQ2d at 1396.

The remainder of the claimed subject matter pertains to a particular biosensor. It is disclosed by applicant at page 3, lines 5-9 that that "the type of sensor to be contained in the container of the present invention is not particularly limited and the sensors may have or may not have lightfastness". It is further disclosed by the applicant beginning at page 7 of the specification that the particular disclosed biosensor to be by way of example only, and accordingly identified as by applicant as conventional and not of any particular relation to the container structure. Applicant, at the time the invention was made, indicated that the biosensor per se was not of an inventive nature. Accordingly, the container-biosensor combination has been merely limited to a very particular biosensor, but one which applicant has himself identified and disclosed as being by way of example only, and not itself inventive in its combination with the container. Furthermore, the particular biosensor as claimed is not seen, in the claimed container-biosensor combination, to distinguish any new or unobvious difference from the container and any other conventional biosensor in combination. Accordingly, since there is no disclosed nexus between the claimed container and a particular biosensor structure to render the container-biosensor combination new and unobvious, the extreme limiting of the biosensor structure fails to distinguish any new or unexpected result from the mere particular definition of a biosensor.

In the dependent claims, the further limitations to a particular biosensor fail to render the claimed container-biosensor combination of any new or unobvious arrangement.

5. Claims 10, 13, 16, 19-22, 30-31 and 33-35 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001141686 in view of Beaman et al. (4,589,547), the article to Morris, Feldman et al. (6,461,496), and Karinka et al. (7,501,053). JP 2001141686 discloses a sensor-container combination comprising a container including a container body (3), and a plurality of sensors stored in the container. Beaman et al. disclose providing a container (10) with a transparent container body to allow viewing of the stacked content of the container, and a transparent lid (14). To modify the container of JP 2001141686 employing the transparent container body and transparent lid teaching of Beaman et al. would have been obvious in order to allow complete visual ascertaining of the content of the sensor container, as suggested by Beaman et al.. Morris discloses a sensor including an oxidation-reduction enzyme, a mediator that mediates transfer of electrons caused by oxidation or reduction, a sensor previously known to those of ordinary skill in the field of biosensors. To employ sensors having the conventional properties described above in the modified container combination would merely be the incorporation of a particular biosensor in the general container. "A combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int 'l v. Teleflex Inc.*, 127 S. Ct. 1731, 82 USPQ2d at 1396. **Applicant has originally disclosed the**

particular biosensor per se to not be of an inventive concept, and by way of an example only. Feldman et al. further discloses sensors that are composed of materials resistant to ultraviolet light, therefore having inherent lightfastness. The base sensors do not expressly define ammonia serving as nitrogen associated with a ligand in a biosensor. To any degree the generic nitrogen-containing ligand of Feldman et al. would not obviously include ammonia as nitrogen, Karinka et al. further discloses a biosensor united with an ammonia-containing ligand (see column 5, line 55 through column 6, line 52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a sensor of the claimed sensor-container combination with an ammonia-containing ligand as claimed, as such a modification would predictably serve the purpose intended therefor as disclosed by Karinka et al. to provide an advantageous sensor. "A combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int 'l v. Teleflex Inc.*, 127 S. Ct. 1731, 82 USPQ2d at 1396.

To modify the claimed container of JP 2001141686 employing a particular sensor therein would have been obvious, the choice alterations to the biosensor such as per one combining the general teachings of Morris, Feldman et al. and Karinka et al. being an obvious substitution to one of ordinary skill in the art in order to derive the advantages of a particular sensor per se in the claimed sensor-container combination. Motivation for Morris is KSR substitution of one known reagent for another with expected results (Feldman discloses that a variety of reagents could be used). One with ordinary skill in the art at the time of the invention would have been able to select

the appropriate reagent for the analyte of interest from known reagent compositions for electrochemical test strips. Also, optimization is a motivation as the Morris abstract discloses linear and accurate sensor response over the range of 2-30 mm and minimizing interference from interferants (see penultimate paragraph). Although Morris does not mention whether ruthenium hexamine is lightfast, applicant has disclosed this as an inherent property.

If the biosensor itself were inventive, it would have been claimed individually. In any case, its combination in the claimed container combination provides no new or unexpected result. The invention is the combination of a particular container with a biosensor. The further particularity of the biosensor does not render the combination of a container and the biosensor inventive as a combination. Applicant has originally disclosed the biosensor composition to be arbitrary.

As to claims 13 and 30, Feldman et al. further discloses sensors that are composed of materials resistant to ultraviolet light, therefor having inherent lightfastness.

As to claims 16 and 31, Karinka et al., Feldman et al. and Morris each recognize electrode sensors as detection means is conventional biosensor structure.

As to claims 19 and 33, applicant claims a circular shape for the container. To modify the shape of any container to the cross-sectional shape of its intended contents as claimed would entail a mere change in shape of the container and yield only predictable results. "[I]f a technique has been used to improve one device, and a

person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill." *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1740, 82 USPQ2d 1396 (2007). A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

As to claims 20 and 34, to provide the container body and lid of a conventional hinged arrangement would have been obvious in order to maintain the container body and lid in conjunction for ease of reclosing of the container body, as is conventional knowledge to one of ordinary skill in the art.

As to claims 21 and 35, to provide the container of particular color is a design consideration only, and does not distinguish any new or unexpected utility by its selection in and of itself.

6. Claims 11 and 29 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 10 above, and further in view of either one of Yamamoto et al. (4,889,229) and Swain (3,139,976). The previous combination does not provide for a scale indicating the amount of contents in the container. Yamamoto et al. and Swain each disclose providing a container (11; 11; respectively) that is transparent and provided with a scale (15; 17 and 18) to allow viewing and determining the remaining content of the container. To modify the container of the previous combinations employing the scaled transparent container teaching of either one of

Yamamoto et al. and Swain would have been obvious in order to ascertain the remaining content of the sensor container, as suggested in general for contents by either one of Yamamoto et al. and Swain.

7. Claims 17 and 32 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over the art of paragraph 6 above as applied to claims 10 and 22 above, and further in view of either one of Blackburn et al. (6,761,816) and Cozzette et al. (5,200,051). To employ colorimetric sensors as a detection means in a sensor is disclosed by each of Blackburn et al. and Cozzette et al..

8. Applicant's arguments filed January 11, 2011 have been fully considered but they are not persuasive. To employ a predominantly opaque container with non-lightfastness biosensors, and a more transparent container with lightfast biosensors, when either type of biosensor is commonly known in the filed as of applicant's derivation would appear to be within the level of ordinary skill in the art, given the general knowledge demonstrated by the prior art taken as a whole at the time of applicant's derivation.

Since no response to the telephone interview of January 18, 2011 has been made by applicant, this application has been considered with respect to the last submitted response and made final.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryon P. Gehman whose telephone number is (571) 272-4555. The examiner can normally be reached on Tuesday through Thursday from 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu, can be reached on (571) 272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bryon P. Gehman/
Primary Examiner, Art Unit 3728

Bryon P. Gehman
Primary Examiner
Art Unit 3728

BPG